Fall 2023

USC Marshall School of Business

# BUAD 315x – Basics of Project and Operations Management for non-Majors

# Fall 2023 Syllabus Mon/Wed – 2:00-3:50 PM – 2 Units

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Office Hours:	Tu 2:30-3:30 PM BRI-401E, and by appointment

# **Course Description**

Introduction to tools and methods for the design, production, and delivery of goods and services, and the techniques for planning, monitoring, and controlling complex projects.

Operations include everything it takes for a business to deliver products or services to our customers. A business, whether it is profit making or non-profit, cannot exist without Operations. One component of Operations is Project Management, which is the oversight of the projects that deliver new value for customers with intent to meet scope, schedule and budget.

In the first half of this course, you will learn the basics of Operations including a high-level understanding of Supply Chain, measuring and optimizing processes, how to use Little's Law, strategic decision making when faced with uncertainty, and more.

In the second half we will focus on the delivery of Projects and their components. We will discuss traditional Waterfall Projects as well as Agile Projects, and even discuss topics like Lean and Six-Sigma.

Prerequisites: None

**Registration Restriction**: Not open to business and accounting majors and exchange students

**Credit Restriction**: Not available for degree or major credit for business and accounting majors

Duplicates Credit in BUAD 311 and BUAD 311T.

# Learning Objectives

- 1. Understand high-level Supply Chain vocabulary used in business conversations
- 2. Gather the specific details required to analyze and improve a process
- 3. When faced with uncertainty, determine the best decisions and be able to explain your strategy logically and persuasively.
- 4. Understand Project Management terminology, including the roles and responsibilities of a Project Manager, how they differ from other managers in the company, as well as the roles and responsibilities of project team members and stakeholders both internal and external to the company

- 5. Evaluate project selection tools and use them to select the best project(s) for the success of your company
- 6. Recognize the Project Management trade-offs and provide examples of how they are intertwined
- 7. Plan a project starting with a Work Breakdown Structure to establish the baseline scope, schedule, and budget.
- 8. Use scheduling tools to determine the critical path and manage project tasks that may impact the project schedule
- 9. Demonstrate the ability to optimize the trade-offs between schedule and cost
- 10. Using Earned Value Analysis, determine the status of a project as well as estimated completion dates and approximate final expenses.
- 11. Explain the similarities and differences between Waterfall, Agile, Lean and Six Sigma

# **Materials**

For most of the class, lecture notes, materials on blackboard, and Slack discussion posts will be sufficient. If you are interested in greater detail than what we discuss in class, you may choose (*optionally*) to refer to the BUAD 311 textbook. Textbook chapters 2, 3, and 8 from *BUAD 311 Operations Management* are available on ARES at no charge (see Blackboard  $\rightarrow$  Resources  $\rightarrow$  Ares).

# Prerequisites and/or Recommended Preparation:

This course has no prerequisites.

## Course Notes:

We will use **Slack** as our main method of communication. If you have not used Slack previously, go to the Student Toolkit on <u>https://keepteaching.usc.edu/</u> to find information about Slack, including how to download and install it on your desktop and mobile device. If you have trouble seeing our class channel, please send me a Slack DM or email so I can get that resolved for you.

Prior to each lecture, check either Blackboard or Slack for any **required prework** (articles to read, short videos to watch, etc.) so you will be prepared to participate in class.

During class, **Poll Everywhere** is used to keep students engaged. You will access polls at <u>pollev.com/kathytakayama/</u> from your mobile device or laptop. For your poll responses to earn participation credit, your screen name must match your name in Blackboard.

### **Practice**

To learn Operations and Project Management, you need to practice. Several practice sets will be shared to help you solidify the topics discussed in class and to help prepare you for the Quizzes, Midterm, and Final. You are encouraged to work on these with study buddies and to discuss during Office Hours. These are for your practice only (you will not turn them in). Do not get behind on your practice sets since you want to complete these prior to starting quiz preparation or working on sample exams.

### <u>Quizzes</u>

There are two guizzes which conribute 10% each to your final grade. Quizzes are not cumulative. Quizzes are meant to help keep you "on track" with the course material. To help you prepare, approximately a week before each quiz a short set of quiz preparation questions will be distributed. You are free to work in groups on these questions (and encouraged to do so), but you cannot ask the TAs, tutors or instructors for help with them. On the day of the guiz, one of the guestions will be randomly selected from the quiz preparation materials, with slightly different numbers and small modifications. If you have done the guiz preparation guestions diligently, the guiz should be very easy for you. Solutions to the guizzes will be distributed only after all students have taken the guiz, at which point you are free to meet with the TA, tutors or instructor for help with the questions. Unless stated otherwise, all quizzes are closed books and there are no cribsheets permitted for guizzes. Quizzes will be online through Blackboard. Each guiz will be available in a 24-hour window, where you can start the guiz and it will be given 25 minutes to complete. Collaboration of any sort on the actual guizzes is strictly prohibited and may result in an "F" in the course grade. Any suspicion of cheating will be reported and investigated by USC. Please see the "Academic Integrity and Conduct" section below for further details.

# Midterm and Final Exam

There is a midterm exam and a final exam; the final exam is **non-cumulative**. All exams are closed books. Each student may bring two letter-sized (8.5"x11") double-sided crib sheets for the midterm and the final exams. Each student should also bring a stand-alone calculator capable of power and square root operations. Students may not share the same crib sheet or calculator during a test. Collaboration of any sort on exams is strictly prohibited and may result in an "F" in the course grade. Any suspicion of cheating will be

reported and investigated by USC. Please see the "Academic Integrity and Conduct" section below for further details.

The midterm and final examination will take place in class. The final exam is on Monday, October 9, 2023, 2:00 PM – 3:50 PM. According to the USC Office of Academic Records and Registrar, "No student in a course with a final examination is permitted to omit the final examination or take the final examination prior to its scheduled date, and no instructor is authorized to permit a student to do so. No student is allowed to re-take a final examination or do extra work in a course after the semester has ended for purposes of improving his or her grade."

Students must attend all exams at the indicated times and dates. If you foresee a conflict, you must contact the instructor within the <u>first three weeks of the semester</u> to explore alternative options, to be determined by the entire 311 teaching team. No rescheduling of exams will be allowed after the first three weeks of class. The only exception is a "documented medical emergency," for which the student must provide all of the following documentation by the time of the exam: (1) A signed doctor's note, with the name and phone number of the medical professional verifying the medical emergency; (2) An email from the student's Marshall advisor; (3) An email from a USC Support and Advocacy advisor (see "Support Systems" below). For all other reasons of missing a quiz or an exam, including travels for non-emergencies, interviews, adverse traffic conditions, or forgetfulness about exam time, the student will not be allowed to reschedule, and missing a quiz or an exam will result in a zero for the quiz or the exam.

# **Grading Policies:**

#### Participation

- Participation is measured by your engagement through polls and class discussions
- If you are unable to attend class, recordings will be posted by the end of the day; there may be participation quizzes to allow you to earn participation credit even though you were not attending class in person

#### Make up Exams

Students must attend all exams at the indicated times and dates. If you foresee a conflict, you must contact the instructor within the first three weeks of the semester to explore alternative options. No rescheduling of exams will be allowed after the first three weeks of class. The only exception is a "documented medical emergency," for which the student must provide the following documentation by the time of the exam: (1) A signed doctor's note, with the name and phone number of the medical professional verifying the medical emergency; (2) An email from the student's Marshall advisor. For all other reasons of missing an exam, including travels for non-emergencies, interviews, adverse traffic conditions, or forgetfulness about exam time, the student will not be allowed to reschedule, and missing an exam may result in a zero for that exam.

# **GRADING DETAIL**

<b>Assignments</b>	<u>% of Grade</u>
Participation	10%
Quizzes	20%
Midterm Exam	35%
Final Exam	<u>35%</u>
Total	100%

Final grades represent how you perform in the class relative to other students. The average grade for this class is typically about 3.50. Three items are considered when assigning final grades:

- 1. Your average weighted score as a percentage of the available points (the points you receive divided by the number of points possible)
- 2. The overall average percentage score within the class.
- 3. Your rank among all students in the class.

# COURSE CALENDAR

Session	Topics/ Daily Activities	Pre-Work	Quizzes
Week 1 1 Mon, 08/21 2 Wed, 08/23	Intro to Ops, Intro to SC Process Analysis	Welcome Video, Syllabus, Slack Videos, PollEv Process Videos, Starbucks arti- cles	
Week 2 3 Mon, 08/28 4 Wed, 08/30	Little's Law Decision Trees	"Little's Law is big for Startups"	Quiz #1
Week 3 5 Mon, 09/04 6 Wed, 09/06	[ <i>Labor Day</i> ] Midterm Review		
Week 4 7 Mon, 09/11 8 Wed, 09/13	MIDTERM Intro to Project Mgmt	"Proj Mgmt Stats"	
Week 5 9 Mon, 09/18 10 Wed, 09/20	Project Planning I Project Planning II		
Week 6 11 Mon, 09/25 12 Wed, 09/27	Monitor and Manage Closing Projects		Quiz #2
Week 7 13 Mon, 10/02 14 Wed, 10/04	Agile, Lean Six-Sigma Final Review	Agile Videos	
Week 8 15 Mon, 10/09	FINAL		

## **ADDITIONAL INFORMATION**

#### Add/Drop Process

Most Marshall classes are open enrollment through the Add deadline. If there is an open seat, you can add the class using Web Registration. If the class is full, you will need to continue checking Web Registration or the USC Schedule of Classes (<u>https://classes.usc.edu/</u>) to see if a space becomes available. Students who do not attend the first two class sessions may be dropped from the course. There are no formal wait lists for Marshall undergraduate courses, and professors cannot add students or increase the course capacity. For this semester's add/drop deadlines, please refer to the USC Schedule of Classes at <a href="https://classes.usc.edu/">https://classes.usc.edu/</a>.

#### **Course Content Distribution and Synchronous Session Recordings Policies**

USC has policies that prohibit recording and distribution of any synchronous and asynchronous course content outside of the learning environment.

Recording a university class without the express permission of the instructor and announcement to the class, or unless conducted pursuant to an Office of Student Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future, and thus infringe on the academic freedom of other students as well as the instructor. (Living our Unifying Values: The USC Student Handbook, page 13).

Distribution or use of notes, recordings, exams, or other intellectual property, based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study. This includes but is not limited to providing materials for distribution by services publishing course materials. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the internet, or via any other media. (Living our Unifying Values: The USC Student Handbook, page 13).

# **Open Expression and Respect for All**

An important goal of the educational experience at USC Marshall is to be exposed to and discuss diverse, thought-provoking, and sometimes controversial ideas that challenge one's beliefs. In this course we will support the values articulated in the USC Marshall "Open Expression Statement" (<u>https://www.marshall.usc.edu/about/open-expression-statement</u>).

#### Academic Integrity:

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the USC Student Handbook. All students are expected to submit assignments that are original work

and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

**Artificial intelligence (AI):** In this course, I encourage you to use artificial intelligence (AI)-powered programs to help you with assignments that indicate the permitted use of AI, Think of AI as another partner you would brainstorm with just like a fellow student in your study groups. You should also be aware that AI text generation tools may present incorrect information, biased responses, and incomplete analyses; thus, they are not yet prepared to produce text that meets the standards of this course. To adhere to our university values, you must cite any AI-generated material (e.g., text, images, etc.) included or referenced in your work and provide the prompts used to generate the content. Using an AI tool to generate content without proper attribution will be treated as plagiarism and reported to the Office of Academic Integrity. Please review the instructions in each assignment for more details on how and when to use AI Generators for your submissions.

You may **NOT** use AI tools on Quizzes, the Midterm, or the Final, as these are individual assessments.

For more information about academic integrity see the student handbook or the Office of Academic Integrity's website, and university policies on Research and Scholarship Misconduct.

# **Students and Disability Accommodations**

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at <u>osasfrontdesk@usc.edu</u>.

# Emergency Preparedness/Course Continuity

In case of a declared emergency if travel to campus is not feasible, the USC Emergency Information web site (<u>http://emergency.usc.edu/</u>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of

USC's Blackboard learning management system (<u>blackboard.usc.edu</u>), teleconferencing (<u>usc.zoom.com</u>), our class communication tool (<u>usc.slack.com</u>), and other technologies.

# Support Systems:

<u>Counseling and Mental Health</u> - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

# <u>988 Suicide and Crisis Lifeline</u> - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

<u>Relationship and Sexual Violence Prevention Services (RSVP)</u> - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

# Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

# The Office of Student Accessibility Services (OSAS) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

# USC Campus Support and Intervention - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

# Diversity, Equity and Inclusion - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

<u>USC Emergency</u> - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

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Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call

Non-emergency assistance or information.

<u>Office of the Ombuds</u> - (213) 821-9556 (UPC) / (323-442-0382 (HSC) A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

<u>Occupational Therapy Faculty Practice</u> - (323) 442-2850 or <u>otfp@med.usc.edu</u> Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.